

**Iowa Department of Natural Resources
Title V Operating Permit**

Name of Permitted Facility: John Deere Waterloo Works

Facility Location: 400 Westfield Avenue

Waterloo, Iowa 50701

Air Quality Operating Permit Number: 03-TV-027

Expiration Date: August 26, 2008

EIQ Number: 92-1319

Facility File Number: 07-01-077

Responsible Official

Name: Barry W. Schaffter

Title: General Manager

Mailing Address: 3500 E. Donald St.

Waterloo, IA 50704

Phone #: 319/292-7828

Permit Contact Person for the Facility

Name: Fred Van Schepen

Title: Senior Engineer

Mailing Address: P.O. Box 270

Waterloo, Iowa 50704

Phone #: 319/292-4492

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Douglas A. Campbell, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	actual cubic feet per minute
BHP.....	brake horse power
CFR.....	Code of Federal Regulation
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
gr./dscf.....	grains per dry standard cubic foot
gr./100 cf.....	grains per one hundred cubic feet
HP/hr.....	horsepower hours
IAC.....	Iowa Administrative Code
in ³ /hr.....	cubic inches per hour
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NSPS.....	new source performance standard
ppmv.....	parts per million by volume
lb./hr.....	pounds per hour
lb./MMBtu.....	pounds per million British thermal units
scfm.....	standard cubic feet per minute
SIC.....	Standard Industrial Classification Code
TPH.....	tons per hour
TPY.....	tons per year
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter ten microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC.....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: John Deere Waterloo Works

Permit Number: 03-TV-027

Facility Description: Farm Machinery and Equipment Manufacture (SIC 3523)

Equipment List

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
Welding Stations		
1020-01	1020-01	Three Station Welding Booth
1020-12	1020-12	Two Station Welding Booth
K2-03	K2-03	Welding Exhaust
Natural Gas Boilers		
1020-13	1020-13	Boiler 1020-13
1020-14	1020-14	Boiler 1020-14
Tumblast Systems		
D1-03	D1-03	Tumblast System 4990, 5652, and 1241
D1-05	D1-05	Tumblast System 3170, 2674, and 2837
P5-02	P5-02	Tumblast 2830
P5-03	P5-03	Tumblast 5252
Sludge Conditioning		
J7-03	J7-03	Sludge Conditioning Tanks
J7-04	J7-04	Lime Slurry Tank
"L" Boilers		
L-01	L-01	Boiler L-01
L-02	L-02	Boiler L-02
L-03	L-03	Boiler L-03
L-04	L-04	Boiler L-04
L-05	L-05	Boiler L-05
L-06	L-06	Boiler L-06
L-07	L-07	Oil Burning Boiler L-07

Emission Point Number	Associated Emission Unit Number(s)	Associated Emission Unit Description
Process Tanks		
TNK	TNK-184	Process Tank No. 184
TNK	TNK-187	Process Tank No. 187
TNK	TNK-189	Process Tank No. 189
TNK	TNK-194	Process Tank No. 194
TNK	TNK-202	Process Tank No. 202
TNK	TNK-203	Process Tank No. 203
Miscellaneous Sources		
1020-09	1020-09	Thermal Deburr 2328
1020-15	1020-15	Solvent Washer Machine 6269
D4-01	D4-01	Acid Etch Station
J7-01 & J7-02	J7-01 & J7-02	Dry Lime Storage Silos
K2-04	K2-04	Plasma Cutting Booth
P4-01	P4-01	Spinner Cabinet
R1-02	R1-02	Brake Adhesive Application 5141
Z1-01 – Z1-03	Z1-01 – Z1-03	Magnaglos (Magnetic Parts Inspection Machines)
Mist Coll	Mist Collectors	Machining Mist Collectors Across Factory

Insignificant Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
A-01	16 BHP Generator
A-02	180 BHP Generator
C-01	Natural Gas Furnace 2980 (<10 MMBtu)
C-03	Natural Gas Furnace 3292 (<10 MMBtu)
C-06	Natural Gas Furnace 3294 (<10 MMBtu)
C-15 – C-17	Natural Gas RX Furnaces 5673 - 5675 (<10 MMBtu)
C-18	Natural Gas Temper Furnace 3295 (<10 MMBtu)
C1-01	Natural Gas Furnace 6213 (<10 MMBtu)
C1-02	Natural Gas Furnace 4673 (<10 MMBtu)
C1-04	Natural Gas Furnace 8941 (<10 MMBtu)
C1-05	Natural Gas Furnace 8037 (<10 MMBtu)
C1-07	Natural Gas Batch Furnace 8048 (<10 MMBtu)
C1-08	Natural Gas Batch Furnace 6215 (<10 MMBtu)
C1-09	Natural Gas Batch Furnace 5200 (<10 MMBtu)
C1-10	Natural Gas Batch Furnace 5174 (<10 MMBtu)
C1-11	Natural Gas Batch Furnace 5201 (<10 MMBtu)
C1-12	Natural Gas Batch Furnace 5150 (<10 MMBtu)

Insignificant Emission Unit Number	Insignificant Emission Unit Description
C1-13	Quench Oil Tank
C1-14	Natural Gas Batch Furnace 6229 (<10 MMBtu)
C1-17	Natural Gas Furnace 9037 (<10 MMBtu)
C1-18	Natural Gas Furnace 6214 (<10 MMBtu)
C5-01	Natural Gas Furnace 6764 (<10 MMBtu)
C5-06	Natural Gas Furnace 9749 (<10 MMBtu)
C5-09	Natural Gas Carburizer Furnace 4962 (<10 MMBtu)
C5-10	Natural Gas Carburizer Furnace 5075 (<10 MMBtu)
C5-11	Natural Gas Temper Furnace 5076 (<10 MMBtu)
C5-12	Natural Gas Carburizer Furnace 5908 (<10 MMBtu)
C5-13	Natural Gas Temper Furnace 5899 (<10 MMBtu)
C6-01	Natural Gas Furnace 9937 (<10 MMBtu)
C6-02	Natural Gas Furnace 9848 (<10 MMBtu)
C6-03	Natural Gas Furnace 9752 (<10 MMBtu)
C6-04 – C6-05	Natural Gas Furnace 9969 & 9970 (<10 MMBtu)
D5-01	Diesel Generator (16 HP/hr)
E-01	Natural Gas Oven 3147 (<10 MMBtu)
E-02	Training Welding Stations
H-01	Tunnel Milling
H-02	Cutter Mill
J7X-01	Waste Oil Heating Tank T35 (5,331 gal.)
J7X-02	Waste Oil Heating Tank T36 (5,331 gal.)
K4-02	Natural Gas Furnace 8724 (<10 MMBtu)
K4-05	Natural Gas RX Furnace 5693 (<10 MMBtu)
K4-08	Natural Gas Furnace 6528 (<10 MMBtu)
K4-09	Natural Gas Furnace 5113 (<10 MMBtu)
K4-10	Natural Gas Furnace 1886 (<10 MMBtu)
Part Cleaning	Fugitives for Part Cleaning Processes
Misc	Fugitive Welding Plant Wide
Magnaglo	Fugitive Magnaglo Operations Plant Wide
Misc. Acid Etch	Fugitive Acid Etch Plant Wide
Misc. Adhesives	Fugitive Adhesives Plant Wide
Misc. Cleaner	Fugitive Cleaners Plant Wide
Misc. Lubricant	Fugitive Lubricants Plant Wide
Misc. Paint	Fugitive Paint Plant Wide
Rust	Fugitive Rust Preventative Plant Wide
P5-07	Natural Gas Furnace 3666 (<10 MMBtu)
P5-12	Natural Gas Furnace 9962 (<10 MMBtu)
P5-13	Natural Gas Furnace 9963 (<10 MMBtu)
R1-01	Plastisol Oven
R1-03	Plastisol Oven
TNK-185 & 186	Process Tanks Nos. 185 & 186 (10,000 gal.)
TNK-188	Process Tank No. 188 (10,000 gal.)

Insignificant Emission Unit Number	Insignificant Emission Unit Description
TNK-190 - 193	Process Tanks No. 190 through 193 (10,000 gal.)
TNK-195 - 201	Process Tanks No. 195 through 201 (10,000 gal.)
TNK-205A & B	Process Tanks Nos. 205A & 205B (3,000 gal.)
W1-01	Natural Gas Carburizer Furnace 8942 (<10 MMBtu)
W1-02	Natural Gas Temper Furnace 4033 (<10 MMBtu)
W1-03	Natural Gas Temper Furnace 4034 (<10 MMBtu)
W1-04	Sandblast 9953
HVY	Heavy Oil and Greases
Magnaglo	Fugitive Magnaglo Operations Plant-Wide
Misc	Fugitive Welding Plant-Wide
Rust	Fugitive Rust Preventative Plant-Wide
Heat Treat	Heat Treat Furnaces & Induction Heat-Treat Plant-Wide

II. Plant-Wide Conditions

Facility Name: John Deere Waterloo Works
Permit Number: 03-TV-027

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: Five (5) Years
Commencing on: August 27, 2003
Ending on: August 26, 2008

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

Emission Limits

Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO₂): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)¹:

No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).

Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

¹ This is the current language in the Iowa Administrative Code (IAC). This version of the rule is awaiting EPA approval to become part of Iowa's State Implementation Plan (SIP). When EPA approves this rule, it will replace the older version and will be considered federally enforceable.

Particulate Matter (federally enforceable)²:

The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.

Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
4. Covering at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

Authority for Requirement: 567 IAC 23.3(2)"c"

Compliance Plan

The owner/operator shall comply with the applicable requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, John Deere Waterloo Works is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which become effective during the permit term, John Deere Waterloo Works shall comply with such requirements in a timely manner.

Authority for Requirement: 567 IAC 22.108(15)

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² This is the current language in the Iowa SIP, and is enforceable by EPA.

Title IV

This facility has been evaluated for Title IV applicability as per 567 IAC 22.122 and has been found to not be subject to any of the Title IV requirements.

III. Emission Point-Specific Conditions

Facility Name: John Deere Waterloo Works

Permit Number: **03-TV-027**

Emission Point ID Number: See Table: Welding Stations

Emission Unit Description

Table: Welding Stations

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
1020-01	1020-01	Three Station Welding Booth	Welding Rod	40 lb./hr
1020-12	1020-12	Two Station Welding Booth	Welding Rod	24.9 lb./hr
K2-03	K2-03	Welding Exhaust	Welding Rod	32.4 lb./hr

Applicable Requirements

(The following requirements apply to the emission units identified in Table: Welding Stations)

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Table: Welding Stations-Emission Limits

Emission Point Number	Associated Emission Unit Number	Opacity Limit	PM Limit	PM ₁₀ Limit (lb./hr)	Construction Permit #
1020-01	1020-01	40%	0.1 gr./scf	0.43	96-A-971
1020-12	1020-12	40%	0.1 gr./scf	0.12	96-A-969
K2-03	K2-03	40% ⁽¹⁾	0.1 gr./dscf	1.36 ⁽²⁾	02-A-376

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: Iowa DNR Construction Permits specified in Table: Welding
Stations-Emission Limits
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./scf

Authority for Requirement: Iowa DNR Construction Permits specified in Table: Welding
Stations-Emission Limits
567 IAC 23.3(2)"a"

Pollutant: PM₁₀

Emission Limit(s): See Table: Welding Booths-Emission Limits

Authority for Requirement: Iowa DNR Construction Permits specified in Table: Welding
Stations-Emission Limits

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

The following limits and requirements apply to Emission Unit 1020-12 only.

Process throughput:

1. The twelve month total, rolled monthly, use of electrode in the welding operation administered under DNR permit 96-A-969 shall not exceed three (3) tons.

Reporting & Record keeping

1. The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly, use of electrode in the welding operation administered under DNR permit 96-A-969. Records shall be maintained for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

Authority for Requirement: Iowa DNR Construction Permit 96-A-969

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point 1020-01

Stack Height (feet): 45

Stack Diameter (inches): 24

Stack Exhaust Flow Rate (acfm): 5,009

Stack Temperature (°F): 70

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 96-A-971

Emission Point 1020-12

Stack Height (feet): 36

Stack Diameter (inches): 14

Stack Exhaust Flow Rate (acfm): 1,367

Stack Temperature (°F): 70

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 96-A-969

Emission Point K2-03

Stack Height (feet): 26.2

Stack Diameter (inches): 24

Stack Exhaust Flow Rate (scfm): 1,592

Stack Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-376

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: See Table: Natural Gas Boilers-Description

Emission Unit Description

Table: Natural Gas Boilers-Description

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
1020-13	1020-13	Boiler 1020-13	Natural Gas or Propane	10.46 MMBtu/hr
1020-14	1020-14	Boiler 1020-14	Natural Gas or Propane	25.106 MMBtu/hr

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): No Visible Emissions⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits 97-A-289-S1 (1020-13) and 97-A-290-S1 (1020-14).
567 IAC 23.3(2)"d"

⁽¹⁾ If visible emissions are observed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter

Emission Limit(s): 0.6 lb./MMBtu

Authority for Requirement: Iowa DNR Construction Permits 97-A-289-S1 (1020-13) and 97-A-290-S1 (1020-14).
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.01 lb/hr and 500 ppmv

Authority for Requirement: Iowa DNR Construction Permits 97-A-289-S1 (1020-13) and 97-A-290-S1 (1020-14).
567 IAC 23.3(3)"e"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput: The boilers of this permit shall be fueled on natural gas or propane gas only.

Authority for Requirement: Iowa DNR Construction Permits 97-A-289-S1 (1020-13) and 97-A-290-S1 (1020-14).

Reporting & Record keeping: Records shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. All records shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner. Records shall indicate the following:

1. The amount of each type of fuel combusted each day.

Authority for Requirement: 40 CRFR 60.48c

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point 1020-13

Stack Height (feet): 45

Stack Diameter (inches): 20

Stack Exhaust Flow Rate (scfm): 2,039

Stack Temperature (°F): 300

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 97-A-289-S1

Emission Point 1020-14

Stack Height (feet): 45

Stack Diameter (inches): 24

Stack Exhaust Flow Rate (sfm): 4,894

Stack Temperature (°F): 300

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 97-A-290-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: See Table: Tumblast Systems

Emission Unit Description

Table: Tumblast Systems

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Control Equipment Number	Control Equipment Description	Rated Capacity
DI-03	D1-03	Tumblast System 5652, 1241, & 4990	Steel Parts	CE-02	Baghouse	121 TPH
DI-05	D1-05	Tumblast System 5652, 1241, & 4990	Steel Parts	CE-50	Baghouse	121 TPH
P5-02	P5-02	Tumblast 2830	Steel Parts	EE-15	Baghouse	54.81 TPH
P5-03	P5-03	Tumblast 5252	Steel Parts	CE-16	Baghouse	54.81 TPH

Applicable Requirements

(The following requirements apply to the emission units identified in Table: Tumblast Systems)

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Table: Tumblast Systems-Emission Limits

Emission Point Number	Associated Emission Unit Number	Opacity Limit	PM Limit			PM ₁₀ Limit (lb./hr)	Construction Permit #
			gr./scf	lb./hr	TPY		
D1-03	D1-03	40% ⁽¹⁾	0.05	5.56 ⁽²⁾	24.4 ⁽³⁾	0.52 ⁽²⁾	96-A-952-S2
D1-05	D1-05	40%	0.05	N/A	N/A	N/A	80-A-082-S2
P5-02	P5-02	40%	0.1	0.05	N/A	N/A	79-A-229
P5-03	P5-03	40%	0.1	0.05	N/A	N/A	78-A-003

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of no visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs.

⁽³⁾ Standard is a 12-month rolling total.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: Iowa DNR Construction Permits 79-A-229, 80-A-082-S2, and 96-A-952-S2
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (Emission Units P5-02, and P5-03 only)

Emission Limit(s): 0.1 gr./scf

Authority for Requirement: Iowa DNR Construction Permits 79-A-229 and 78-A-003
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter (Emission Unit D1-03 only)

Emission Limit(s): 5.56 lb./hr and 24.4 TPY

Authority for Requirement: Iowa DNR Construction Permit 96-A-952-S1

Pollutant: Particulate Matter

Emission Limit(s): 0.05 gr./scf

Authority for Requirement: Iowa DNR Construction Permits 80-A-082-S2 and 96-A-952-S2
567 IAC 23.4(6)

Pollutant: PM₁₀ (Emission Unit D1-03 only)

Emission Limit(s): 0.52 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 96-A-952-S2

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Emission Point D1-03

Stack Height (feet): 23

Stack Diameter (inches): 23

Stack Exhaust Flow Rate (scfm): 9,600

Stack Temperature (°F): Ambient (68)

Discharge Style: Horizontal discharge

Authority for Requirement: Iowa DNR Construction Permit 96-A-952-S2

Emission Point D1-05

Stack Height (feet): 11

Stack Diameter (inches): 12 X 12

Stack Exhaust Flow Rate (scfm): 3,700

Stack Temperature (°F): Ambient (68)

Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permit 96-A-952-S2

The following equipment is vented through these emission points:

1. Tumblast 4990 (D1-03A) 84 Tons per Hour
2. Shot Blast 5652 (D1-03B) 25 Tons per Hour
3. Shot Peen 1241 (D1-03C) 12 Tons per Hour

Note: The capacity listed above is the shot delivery rate.

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: See Table: Sludge Conditioning

Emission Unit Description

Table: Sludge Conditioning

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Control Equipment Number	Control Equipment Description	Rated Capacity (TPH)
J7-03	J7-03	Sludge Conditioning Tanks	Lime	CE-10	Baghouse	12.5
J7-04	J7-04	Lime Slurry Tank	Lime	CE-11	Baghouse	0.06

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./scf

Authority for Requirement: Iowa DNR Construction Permits 91-A-078 (J7-03) and 91-A-079 (J7-04).
567 IAC 23.3(2)"a"

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Numbers: See Table: "L" Boilers-Description

Emission Unit Description

Table: "L" Boilers-Description

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (MMBtu/hr)	Construction Permit
L-01	L-01	Boiler L-01	Natural Gas or #2 Fuel Oil	33.475	97-A-511-S1
L-02	L-02	Boiler L-02	Natural Gas or #2 Fuel Oil	33.475	97-A-512-S1
L-03	L-03	Boiler L-03	Natural Gas or #2 Fuel Oil	33.475	97-A-513-S1
L-04	L-04	Boiler L-04	Natural Gas or #2 Fuel Oil	33.475	97-A-514-S1
L-05	L-05	Boiler L-05	Natural Gas or #2 Fuel Oil	33.475	97-A-515-S1
L-06	L-06	Boiler L-06	Natural Gas or #2 Fuel Oil	33.475	97-A-516-S1

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 20%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers-Description

567 IAC 23.1(2)"III"

40 CFR 60.43c(c)

⁽¹⁾(6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

Pollutant: Particulate Matter

Emission Limits: 0.8 lb./MMBtu and 59.6 TPY⁽²⁾

Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers-Description

Pollutant: Particulate Matter

Emission Limits: 0.6 lb./MMBtu

Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: PM₁₀

Emission Limit(s): 0.81 lb./hr and 59.6 TPY⁽²⁾

Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers-Description

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 6.9 lb./hr and 27.1 TPY⁽²⁾
Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers-
Description

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 8.3 lb/hr and 112.6 TPY⁽²⁾
Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers-
Description

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 15.3 TPY⁽²⁾
Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers-
Description

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 78.8 TPY⁽²⁾
Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers-
Description

⁽²⁾Total for sources L-01 through L-06.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. These sources shall burn either #2 fuel oil or natural gas.
2. The sulfur content of the #2 fuel oil burned shall not exceed 0.2% by weight.
3. The total amount of #2 oil burned by these sources shall not exceed 286,929 gallons per 12-month rolling period.

Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers- Description

Reporting & Record keeping:

Reports shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources. These records shall show the following:

1. The sulfur content of the #2 fuel oil shall be recorded in accordance with the New Source Performance Standards 40 CFR 60.46c.

Authority for Requirement: Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers- Description
567 IAC 23.1(2)"III"
40 CFR 60.46c

2. The date and type of fuel(s) used.

Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers- Description
567 IAC 23.1(2)"III"
40 CFR 60.48c(g)

3. Determine the annual amount of #2 fuel oil burned by these sources on a rolling 12-month basis for each month of operation.
4. The facility shall keep a record of an initial compliance test that demonstrates compliance with the permitted allowables of the source.

Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers- Description

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground)): 73

Stack Opening (feet, diameter): 1.6

Exhaust Flow Rate (scfm): 6,500

Exhaust Temperature (°F): 300

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permits listed in Table "L" Boilers- Description

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

The following applies to these Emission Points *only while burning fuel oil*, and is only required a maximum of once per calendar week.

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation

and any action resulting from the observation for a minimum of five years. The facility shall use EPA Method 9 with a certified smoke reader for the monitoring method.

If an opacity > (20%) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: L-07

Associated Equipment

Associated Emission Unit ID Number: L-07
Emissions Control Equipment ID Number: CE-L-07-A
Emissions Control Equipment Description: Baghouse

Emission Unit Description

Emission Unit vented through this Emission Point: L-07
Emission Unit Description: Oil Burning Boiler L-07
Raw Material/Fuel: Natural Gas or Waste Oil
Rated Capacity: 9.9 MMBtu/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %⁽¹⁾
Authority for Requirement: Iowa DNR Construction Permit 01-A-289-S2
567 IAC 23.3(2)"d"

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb./MMBtu
Authority for Requirement: Iowa DNR Construction Permit 01-A-289-S2
567 IAC 23.3(2)"b"

Pollutant: PM₁₀
Emission Limit(s): 4.64 lb./hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-289-S2

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 2.5 lb/MMBtu (when combusting fuel oil)
Authority for Requirement: Iowa DNR Construction Permit 01-A-289-S2
567 IAC 23.3(3)"b"(2)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv (when combusting natural gas)
Authority for Requirement: Iowa DNR Construction Permit 01-A-289-S2
567 IAC 23.3(3)"e"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 24.75 lb./hr
Authority for Requirement: Iowa DNR Construction Permit 01-A-289-S2

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The fuel is limited to natural gas or waste oil.
2. Usage of waste oil shall not exceed 540,000 gallons per 12-month rolling period.
3. The sulfur content of any waste oil used in this boiler shall not exceed 2.1 percent by weight.
4. The amount of used oil combusted in this boiler shall not exceed 45 gallons per hour.

Control equipment parameters:

1. The control equipment shall be operated and maintained according to manufacturer's specifications.

Reporting & Record keeping:

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. Record the quantity of waste oil consumed per 12-month rolling period.
2. Record the sulfur content of the waste oil, in weight percent.
3. Record the amount of used oil combusted in this boiler, in gallons per hour.
4. Record all the maintenance and repair to the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 01-A-289-S2

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 68

Stack Opening (inches, diameter): 16

Exhaust Flow Rate (scfm): 2,898

Exhaust Temperature (°F): 369

Vertical, Unobstructed Discharge Required: Yes ☒ No ☐

Authority for Requirement: Iowa DNR Construction Permit 01-A-289-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: See Table: Process Tanks

Emission Unit Description

Table: Process Tanks

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity (gallons)
TNK-184	TNK-184	Process Tank No. 184	#2 Fuel Oil	10,000
TNK-187	TNK-187	Process Tank No. 187	Gasoline	10,000
TNK-194	TNK-194	Process Tank No. 194	#2 Fuel Oil	10,000
TNK-189	TNK-189	Process Tank No. 189	Coolant	10,000
TNK-202	TNK-202	Process Tank No. 202	Hydraulic Oil	10,000
TNK-203	TNK-203	Process Tank No. 203	Hydraulic Oil	10,000

Applicable Requirements

(The following requirements apply to the emission units identified in Table: Process Tanks)

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

There are no emission limits at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Table: Process Tanks-Operational Limits

Emission Point Number	Associated Emission Unit Number	Process Throughput Limit	Reporting & Recordkeeping ⁽¹⁾	Authority for Requirements:
TNK-184	TNK-184	None at this time.	Determine the annual throughput of material on a rolling 12-month basis for each month of operation, and keep the records on-site for at least five (5) years.	Iowa DNR Construction Permit 01-A-374
TNK-194	TNK-194			Iowa DNR Construction Permit 01-A-625

Table: Process Tanks-Operational Limits (Cont.)

Emission Point Number	Associated Emission Unit Number	Reporting & Recordkeeping ⁽¹⁾	Authority for Requirements:
TNK-189	TNK-189	1. The permit holder shall maintain records to show the dimensions and an analysis showing the volume of the coolant storage tank of this permit for the life of the vessel.	Iowa DNR Construction Permit 99-A-850 567 IAC 23.1(2)"ddd" 40 CFR 60.116b
		2. Records shall be kept to show the total metered amount per month, measured in gallons, of liquid passing from coolant storage tank. Monthly amounts shall be compiled to determine a twelve-month rolling total amount of material passing from the coolant storage tank. Records shall also show the maximum true vapor pressure of the liquid stored in the tank. These records shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.	Iowa DNR Construction Permit 99-A-850

Emission Point Characteristics

These emission points shall conform to the conditions specified in Table: Process Tanks-EP Characteristics.

Table: Process Tanks-EP Characteristics

Emission Point Number	Emission Unit Number	Construction Permit #	Stack Characteristics				
			Height (feet)	Diameter (inches)	Exhaust Flowrate (acfm)	Exhaust Temp. (°F)	Discharge Style
TNK-184	TNK-184	01-A-374	24	2	Displacement	70	Downward
TNK-194	TNK-194	01-A-625	24	2	Displacement	70	Downward
TNK-189	TNK-189	99-A-850	9	2	N/A	70	Downward
TNK-202	TNK-202	00-A-775	24	2	See note below	Ambient	Downward
TNK-203	TNK-203	00-A-776	24	2	See note below	Ambient	Downward

Note: The exhaust from this unit consists of working and breathing losses. Actual flow rate will vary with tank utilization and atmospheric conditions.

Authority for Requirement: Iowa DNR Construction Permits specified in Table: Process Tanks - EP Characteristics

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 1020-09

Associated Equipment

Associated Emission Unit ID Number: 1020-09

Emission Unit Description

Emission Unit vented through this Emission Point: 1020-09

Emission Unit Description: Thermal Deburr 2328

Raw Material/Fuel: Metal Parts

Rated Capacity: 0.01 TPH

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: Iowa DNR Construction Permit 96-A-970
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.05 gr./scf

Authority for Requirement: Iowa DNR Construction Permit 96-A-970
567 IAC 23.4(6)

Pollutant: PM₁₀

Emission Limit(s): 0.054 lb./hr

Authority for Requirement: Iowa DNR Construction Permit 96-A-970

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The twelve month total, rolled monthly, amount of material processed in the thermal deburr administered under DNR permit 96-A-970 shall not exceed 115 tons.

Reporting & Record keeping:

1. The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly amount of material processed in the thermal deburr administered under DNR permit 96-A-970. Records shall be maintained for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

Authority for Requirement: Iowa DNR Construction Permit 96-A-970

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 36

Stack Diameter (inches): 6

Stack Exhaust Flow Rate (acfm): 258

Stack Temperature (°F): Ambient

Vertical, Unobstructed Discharge Required: Yes ☐ No ☒

Authority for Requirement: Iowa DNR Construction Permit 96-A-970

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: 1020-15

Associated Equipment

Associated Emission Unit ID Number: 1020-15

Emission Unit Description

Emission Unit vented through this Emission Point: 1020-15

Emission Unit Description: Solvent Washer Machine 6269

Raw Material/Fuel: Solvent

Rated Capacity: 3.01 lb./hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

There are no emission limits at this time.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. Annual usage of material in Emission Unit 1020-15 shall be limited to not more than 4000 gallons, with a combined VOC content not to exceed 8.0 pounds per gallon, and a combined HAP content not to exceed 0.25 pound per gallon.

Reporting & Record keeping: Records shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the Department. All records shall be satisfactory for demonstrating compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner. Records shall indicate the following:

1. VOC content, reported in pounds per gallon, of each VOC material used in the washer.
2. HAP content, reported in pounds per gallon, of each HAP material used in the washer.
3. Monthly material usage, reported in gallons per month, of each material used in the washer.
4. After the initial twelve months of operation, a cumulative material usage shall be determined on a rolling 12-month basis for each month of operation.
5. The permit holder shall also monitor the usage of compounds containing hazardous air pollutants (HAP's) and record the respective amount of any HAP. Annual emission total for each HAP shall be recorded in tons.

Authority for Requirement: Iowa DNR Construction Permit 00-A-001

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 42

Stack Diameter (inches): 12

Stack Exhaust Flow Rate (scfm): 1,900

Stack Temperature (°F): 70

Discharge Style: Vertical

Authority for Requirement: Iowa DNR Construction Permit 00-A-001

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: D4-01

Associated Equipment

Associated Emission Unit ID Number: D4-01

Emission Unit Description

Emission Unit vented through this Emission Point: D4-01

Emission Unit Description: Acid Etch Station⁽¹⁾

Raw Material/Fuel: Acid Solution

Rated Capacity: 0.25 lb./hr

⁽¹⁾ See Emission Point Characteristics below for a listing of the dip tanks involved in this system.

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 01-A-022
567 IAC 23.3(2)"d"

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (0%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 01-A-022
567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:

1. The material usage in tanks T-1, T-2, T-3 and T-5 shall not exceed 320 gallons per twelve (12) month rolling period.

Reporting & Record keeping: All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

1. At the end of each month a record of the amount of material added to each tank over the previous month shall be recorded. Additionally, the total amount of material added to all tanks shall be recorded at the end of each month.
2. At the end of each month the total amount of material added to each tank over the previous twelve (12) months shall be recorded. Additionally, the total amount of material added to all tanks over the previous twelve (12) months shall be recorded.

Authority for Requirement: Iowa DNR Construction Permit 01-A-022

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 14.7

Stack Diameter (inches): 16 X 16 (rectangular)

Stack Exhaust Flow Rate (scfm): 2,500

Stack Temperature (°F): Ambient (68⁰ F)

Discharge Style: Obstructed vertical discharge

Authority for Requirement: Iowa DNR Construction Permit 01-A-022

Note: The following dip tanks are involved in this system:

Tank #1: Nitric acid in Ethanol

Tank #2: Ethanol

Tank #3: Hydrochloric acid in Ethanol

Tank #4: Sodium Bicarbonate in Water

Tank #5: Rust Preventative

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: See Table: Dry Lime Storage Silos

Emission Unit Description

Table: Dry Lime Storage Silos

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Control Equipment Number	Control Equipment Description	Rated Capacity
J7-01	J7-01	Dry Lime Storage Silo	Lime	CE-08	Baghouse	12.5 TPH
J7-02	J7-02	Dry Lime Storage Silo	Lime	CE-09	Baghouse	12.5 TPH

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from each emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter

Emission Limit(s): 0.1 gr./scf

Authority for Requirement: Iowa DNR Construction Permits 86-A-030 (J7-01) and 89-A-229 (J7-02).
567 IAC 23.3(2)"a"

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: K2-04

Associated Equipment

Associated Emission Unit ID Numbers: K2-04

Emission Unit Description

Emission Unit vented through this Emission Point: K2-04

Emission Unit Description: Plasma Cutting Booth

Raw Material/Fuel: Steel

Rated Capacity: 337.5 in³/hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40 %⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-588-S1
567 IAC 23.3(2)"d"

⁽¹⁾ Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an "indicator opacity exceedence report" with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter

Emission Limit(s): 0.05 gr./dscf

Authority for Requirement: Iowa DNR Construction Permit 02-A-588-S1
567 IAC 23.4(6)

Pollutant: PM-10

Emission Limit(s): 4.55 lb./hr⁽²⁾

Authority for Requirement: Iowa DNR Construction Permit 02-A-588-S1

⁽²⁾ Standard is expressed as the average of 3 runs.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Hours of operation:

1. The hours of operation for the emission unit, Plasma Cutting Booth (K2-04) affected by this permit shall not exceed 2,500 hours per rolling 12-month period.

Reporting & Record keeping: All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

1. The hours of operation for the emission unit (K2-04) affected by this permit;
2. For the first twelve (12) months of operation, determine the hours of operation for this emission unit (K2-04) for each month of operation;
3. After the first twelve (12) months of operation, determine hours of operation for this emission unit (K2-04) on a rolling 12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 02-A-588-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (feet): 45

Stack Diameter (inches): 42

Stack Exhaust Flow Rate (scfm): 28,000

Stack Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-588-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: P4-01

Associated Equipment

Associated Emission Unit ID Numbers: P4-01
Emissions Control Equipment ID Number: CE-14
Emissions Control Equipment Description: Baghouse

Emission Unit Description

Emission Unit vented through this Emission Point: P4-01
Emission Unit Description: Spinner Cabinet 2350
Raw Material/Fuel: Metal Parts
Rated Capacity: 84 TPH

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.05 gr./scf
Authority for Requirement: Iowa DNR Construction Permit 80-A-143-S1
567 IAC 23.4(6)

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5

years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: R1-02

Associated Equipment

Associated Emission Unit ID Numbers: R1-02

Emission Unit Description

Emission Unit vented through this Emission Point: R1-02
Emission Unit Description: Brake Adhesive Application 5141
Raw Material/Fuel: Adhesive
Rated Capacity: 9.8 TPY

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

There are no emission limits at this time.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: See Table: Magnaglos

Emission Unit Description

Table: Magnaglos

Emission Point Number	Associated Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit No.
Z1-01	Z1-01	Magnaglo (Magnetic Particle Inspection Machine)	Mineral Oil Solution	1.48 lb./hr	96-A-966
Z1-02	Z1-02	Magnaglo (Magnetic Particle Inspection Machine)	Mineral Oil Solution	1.48 lb./hr	96-A-967
Z1-03	Z1-03	Magnaglo (Magnetic Particle Inspection Machine)	Mineral Oil Solution	1.48 lb./hr	96-A-968

Applicable Requirements

Emission Limits (lb/hr, gr/dscf, lb/MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 39 TPY⁽¹⁾

Authority for Requirement: Iowa DNR Construction Permits listed in Table: Magnaglos

⁽¹⁾ Total combined emissions from all three sources.

Operational Limits & Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Reporting & Record keeping: The permit holder shall maintain records on the premises to show the twelve month total, rolled monthly, emission rate of VOCs from these sources. Records shall be maintained for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources.

Authority for Requirement: Iowa DNR Construction Permits listed in Table: Magnaglos.

Emission Point Characteristics

These emission points shall conform to the conditions specified in Table: Magnaglos-EP Characteristics.

Table: Magnaglos-EP Characteristics

Emission Point Number	Emission Unit Number	Construction Permit #	Stack Characteristics				
			Height (feet)	Diameter (inches)	Exhaust Flowrate (acfm)	Exhaust Temp. (°F)	Vertical Unobstructed Discharge Required?
Z1-01	Z1-01	96-A-966	51.5	12.1	1,400	70	No
Z1-02	Z1-02	96-A-967	51.5	20.4	1,400	70	No
Z1-03	Z1-03	96-A-968	51.6	12.1	1,400	70	No

Authority for Requirement: Iowa DNR Construction Permits specified in Table: Magnaglos - EP Characteristics

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

Emission Point ID Number: Mist Coll

Associated Equipment

Associated Emission Unit ID Number: Mist Collectors

Emission Unit Description

Emission Unit vented through this Emission Point: Mist Collectors

Emission Unit Description: Machining Mist Collectors Across the Factory

Raw Material/Fuel: Coolant

Rated Capacity: 1.39 lb./hr

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

Authority for Requirement: 567 IAC 23.3(2)"c"

Periodic Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)"b"

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*

G2. Permit Expiration

1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, four or more copies of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities,

milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.
- e. The results of such analyses; and
- f. The operating conditions as existing at the time of sampling or measurement.
- g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

- a. Comply with all terms and conditions of this permit specific to each alternative scenario.
- b. Maintain a log at the permitted facility of the scenario under which it is operating.
- c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

- a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
- b. Compliance test methods specified in 567 Chapter 25; or
- c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

- a. Any monitoring or testing methods provided in these rules; or
- b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or

the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Oral Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity. The oral report may be made in person or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required oral reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. 567 IAC 24.1(1)-567 IAC 24.1(4)

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance,

careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. *567 IAC 22.108(16)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act.
- e. The changes comply with all applicable requirements.
- f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,

- iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.
- 567 IAC 22.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*
3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*
4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. Aggregate Insignificant Emissions. The permittee shall not construct, establish or operate any new insignificant activities or modify any existing insignificant activities in such a way that the emissions from these activities no longer meet the criteria of aggregate insignificant emissions. If the aggregate insignificant emissions are expected to be exceeded, the permittee shall submit the appropriate permit modification and receive approval prior to making any change. *567 IAC 22.103(2)*
6. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that is required to do any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Permit Modification.

- a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
 - i. Do not violate any applicable requirements
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit.
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or increment analysis.
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act.;
 - v. Are not modifications under any provision of Title I of the Act; and
 - vi. Are not required to be processed as significant modification.
- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
 - i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs.
 - ii. The permittee's suggested draft permit
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of a minor permit modification procedures and a request that such procedures be used; and
 - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant Permit Modification. Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, and those requirements that apply to Title V issuance and renewal. 567 IAC 22.111-567 IAC 22.113 The permittee shall submit an

application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.105(1)"a"(4)*

G19. Duty to Obtain Construction Permits

Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when conducting any renovation or demolition activities at the facility. *567 IAC 23.1(3)"a", and 567 IAC 23.2*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. *567 IAC 23.2 except 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

- d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
- a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

G25. Permit Shield

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements included in this permit as of the date of permit issuance.

This permit shield shall not alter or affect the following:

1. The provisions of section 303 of the Act (emergency orders), including the authority of the administrator under that section;

2. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

3. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act;

4. The ability of the department or the administrator to obtain information from the facility pursuant to section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. 567 IAC 22.108 (8)

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 22.108 (9)"d"

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought to determine transferability of the permit. 567 IAC 22.111 (1)"d"

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. 567 IAC 22.3(3)"c"

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. *567 IAC 26.1(1)*

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Chief of Air Permits
EPA Region 7
Air Permits and Compliance Branch
901 N. 5th Street
Kansas City, KS 66101
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Road, Suite #1
Urbandale, IA 50322
(515) 242-5100

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1

909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 2

P.O. Box 1443
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5

401 SW 7th Street, Suite I
Des Moines, IA 50309
(515) 725-0268

Field Office 6

1004 W. Madison
Washington, IA 52353
(319) 653-2135

Polk County Public Health Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health Dept.

Air Pollution Control Division
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

Appendix: Iowa DNR Air Quality Policy 3-b-08

1998 NOV 13 4

IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

POLICY/PROCEDURE STATEMENT

TOPIC: <u>Opacity Limits</u>

Policy Procedure Number: 3-b-08

Replaces Number: None

Date:

Effective Date: November 12, 1998

Preparer: David Phelps

Reviewer:

Approval: **Bureau Chief:** Peter Hamlin

Date: 11/12/98

Division Administrator: Allan Stokes

Date: 11/12/98

Applicable Code of Iowa or Iowa Administrative Code Rule: 23.3(2)d

“No person shall allow, cause or permit the emission of visible air contaminants into the atmosphere from any equipment, internal combustion engine, premise fire, open fire or stack, equal to or in excess of 40 percent opacity or that level specified in a construction permit, except as provided below and in 567-Chapter 24.”

REASON OR BACKGROUND

The default opacity limit allowed by regulation is 40%. This limit was established with the original regulations in 1970. It is generally accepted that opacity greater than 40% was evidence of a mass emission standard exceedence. More recently, there have been requests from facilities for limits much lower than that allowed by the regulations, in some cases less than 0.01 gr/scf to which a 40% opacity limit does not correspond. Since opacity is used as an indicator of the particulate emission rate, listing an indicated potential problem opacity that is more in line with the mass emission rate is useful. In order to have the authority to set limits lower than 40%, subrule 23.3(2)d was changed. This change allows the department the ability to set opacity limits at a level that more closely corresponds to what would be observed by the source when operating in compliance with its mass emission rate.

Except in the case where a specific opacity limit is established by rule, it has been the general policy of the Department not to take action on opacity limits directly. Rather, if it is felt that a violation of the mass emission rate exists that is not attributable to some abnormal event, a stack test would be required to verify compliance. However, the Department reserves the right to use the results of formal opacity readings as evidence of an exceedence.

DETAILS

It shall be the policy of the Department to list the default opacity as a permit condition and in addition an indicator opacity may be listed.

For ease of proving continual compliance a source may request a 'no visible emissions' opacity limit which allows proof of compliance without having a certified opacity reading taken. In this case any visible emissions would be an exceedence.

The IDNR permit writer may list an opacity that will be a indicator of possible mass emission rate exceedence. If the permittee wishes, the recommended indicator opacity may be changed by demonstrating compliance with the mass emission rate during a stack test while emitting the new desired indicator opacity. If the tested mass emission rate is less than the permitted emission rate, then the desired indicator opacity may be set at a proportionally higher level than observed during the stack test.

If an opacity measurement, taken in accordance with an approved reference method for opacity, (generally USEPA Method 9 or 22) exceeds the indicator opacity then the facility will promptly investigate the source and make corrections. However, if after corrections are made the opacity continues to exceed the indicator opacity the Department may require additional proof to demonstrate compliance with the mass emissions limits.

Recommended indicator opacities shall be:

Grain Loading gr./scf	Recommended Indicator Opacity
<0.01 gr./scf	non specified in permit *
0.01 to 0.06 gr./scf	10% Opacity
0.061 to 0.08 gr./scf	20% Opacity
0.081 to 0.1 gr./scf	25% Opacity

* A line is added to the permit that states: "If visible emissions are observed other than start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard."

If a source is a batch process the indicator opacity shall be based on the table above, but the opacity averaging period, for comparison to the indicator opacity, shall be the entire batch cycle. For purposes of comparison the indicator opacity readings shall be taken during the entire cycle and averaged.

Sources are also given the opportunity to set source specific limits to be coordinated with the initial compliance test. These may then be incorporated into the permit.

In all cases an exceedence of the indicator opacity will require the permittee to file an "indicator opacity exceedence report" to the IDNR regional office. The reporting requirements shall be:

Oral report of excess indicator opacity. An incident of excess indicator opacity (other than an incident of excess indicator opacity during a period of startup, shutdown, or cleaning) shall be reported to the appropriate regional office of the department within eight hours of, or at the start of the first working day following the onset of the of the incident. The reporting exemption for an incident of excess indicator opacity during startup and shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in subrule 25.1(6).

An oral report of excess indicator opacity is not required for a source with operational continuous monitoring equipment (as specified in subrule 25.1(1) if the incident of excess indicator opacity continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity.

The oral report may be made in person or by telephone and shall include as a minimum the following:

- a) The identity of the equipment or source operation from which the excess indicator opacity originated and the associated stack or emission point.
- b) The estimated quantity of the excess indicator opacity.
- c) The time and expected duration of the excess indicator opacity.
- d) The cause of the excess indicator opacity.
- e) The steps being taken to remedy the excess indicator opacity.
- f) The steps being taken to limit the excess indicator opacity in the interim period.

Written report of excess indicator opacity. A written report of an incident of excess indicator opacity shall be submitted as a follow-up to all required oral reports to the department within seven (7) days of the onset of the upset condition, and shall include as a minimum the following:

- a) The identity of the equipment or source operation point from which the excess emission originate and the associated stack or emission point.
- b) The estimated quantity of the excess indicator opacity.
- c) The time and duration of the excess indicator opacity.
- d) The cause of the excess indicator opacity.
- e) The steps that were taken to remedy and to prevent the recurrence of the incident of excess indicator opacity.
- f) The steps that were taken to limit the excess indicator opacity.
- g) If the owner claims that the excess indicator opacity was due to malfunction, documentation to support this claim.

Exceptions to this policy:

- 1) In the case where a facility has an opacity limit established in an existing permit, no change will be made to that permit limit unless the permit is being modified for other purposes.
- 2) If the facility has a continuous opacity monitor, this policy shall not apply.
- 3) This policy shall not apply to opacity limits established in Prevention of Significant Deterioration (PSD) permits or permits that were established for maintenance plans for nonattainment areas.
- 4) This policy shall not apply where an opacity limit is established as an indication of hazardous air pollutants.

- 5) This policy shall not apply where an opacity limit is established by a rule, New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAPS), etc.